ATTACHMENT A

Recommendations for ABS screen design for computer assisted interviewing

Introduction

1   This paper contains recommendations for a screen design to be used in the conduct of population surveys using computer assisted interviewing (CAI). It is expected that this enhanced design will replace the existing screen design which was inherited from the DOS systems for CAI used from 1995 to 2000.

2   The advent of Windows technology and more powerful notebook computers provides more potential in screen design than was possible under DOS. The Blaise software, which is used for CAI at the ABS, also has extensive features for screen presentation which are explored in this document before coming to a specific set of recommendations.

3   The recommendations contained in this paper are based, in part, on papers by Dr Michael Couper, from the University of Michigan USA, and Mark Pierzchala, who works at Westat USA. The design recommendations also take consideration of the hardware and operational circumstances at the ABS at this time.

4   The screen design defined in these recommendations will be assessed through a series of usability tests, details of which are contained in a separate paper.

Section 1: Basic elements of the CAI screen

5   Overall, the goal of the CAI screen is to focus the interviewer's attention rapidly on the key elements of the task, and allow them to complete those tasks efficiently and with minimal error (Couper et al, 2000). Screens often contain action items (the things that the interviewer needs to administer the question, such as the question to be read to respondent, the answer to be recorded and interviewer actions like showing prompt cards), information items (the things that facilitate the interviewer's delivery of the question and recording of the answer, but are not directly part of the Q-A process, such as help, Q by Q specifications, interviewer instructions), and auxiliary items (contextual information, such as Case ID, time/date displays, function key mappings, navigation tools, etc.).

6   When interviewers set their eyes on the screen for the first time, they should be drawn immediately to the key features of the screen needed for successful delivery of the survey question and recording of the response (Couper et al, 2000). To do so requires a consistent design, visual discrimination among the different elements (so interviewers learn what is where, and know where to look), adherence to normal reading behaviour (i.e. start in upper left corner), and removal of unnecessary information (e.g. lines) or other display features that distract the interviewer from the task.

7   Couper et al (2000) propose that this would result in a cleaner design with more "white space" and a clearer distinction of the key components of the screen.

8   The default Blaise screen is presented in Figure 1. Similar to Couper et al (2000), the authors of this paper consider that the basic/default screen layout provided in Blaise requires several changes to facilitate the goals outlined above. The Mode Library component of Blaise permits a great deal of customisation.

Figure 1: Basic Elements of a Blaise CAI Screen
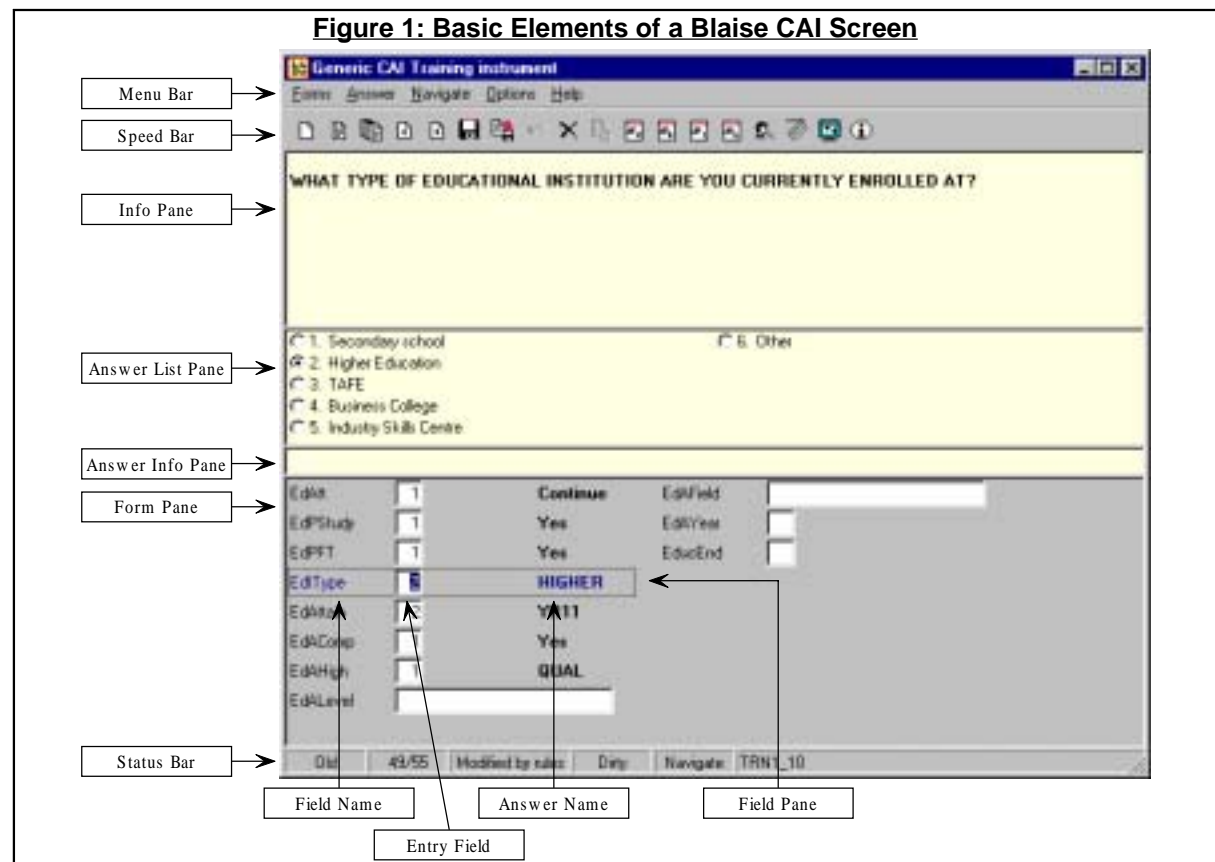
9   The interviewer collects data with the Blaise Data Entry Program (DEP) which features a distinctive split-screen display shown in Figure 1. The screen in Blaise refers to the entire area of the computer window, from the title bar on the top and extending to the status bar on the bottom.

10   The upper part of the screen is called the Info Pane. It contains question text and other information meant for the interviewer. The lower part of the screen is the Form Pane or Page. It contains data entry cells and the cursor moves from one data entry cell to another. Question text displayed in the Info Pane corresponds to the position of the cursor in the Page. The Form Pane can be seen as reflecting a page in a paper questionnaire. The term is intuitive to the interviewer, and the Page Up and Page Down keys move backwards and forwards, one page at a time.

Section 2: Style and Format of the Basic Screen

11   The question text should be the most visible element on the screen, followed by response categories (whether they are to be read out aloud or not should be clear) and the answer/entry box.

General Text and Font:

12   Avoid Clutter. Minimise extraneous information or actions on the screen. Focus the interviewer's attention on the task at hand.

13   Visual flow. The survey questions should be in the top left corner of the screen, while information items should be on the right of the screen, out of the main visual field, but available when needed by the interviewer.

14   Limit customisation. Limit interviewer flexibility in customising their screens as it can potentially interfere with the goals of standardised survey interviewing because its important to have a consistent interface.

15   Justification. Use left-justified text only. Furthermore, grouped items (response categories, radio buttons, check boxes, etc.) should also be left justified and vertically aligned for easier reading.

16   Colour. General recommendation is to use the Blaise default of dark text on cream (for the Info Pane) or light grey (for the Form Pane) background. Specifically, it is recommended that colour be used sparingly (ie. no more than four colours presented on screen at a time), consistency (the same colour should always have the same meaning) and redundantly (i.e., for colour-blind persons, or in sub-optimal lighting conditions, the different-colour items should still be distinguishable because of other features, such as placement, typeface, font size). Certain colours (red/green) should be avoided on the screen.

17   Line length and line spacing. 45-60 characters (8-10 words) is recommended, even though the available screen size may exceed this.

18   Margins. One way to reduce the line length problem and increase the readability of question text is to have a margin or border around the text on the Info Pane. Couper et al (2000) recommends that all text be indented from the top, left and right margins. It is our recommendation that we use a top and left margin of about 5 mm; and a right margin of about 100 mm which would result in keeping the text within the preferred line length.

19   Indentation. Couper et al (2000) also recommends that the interviewer instructions and response categories be indented deeper than regular question text, as a way to further distinguish these items from the question. While the recommendation to indent interviewer instructions is supported for the ABS screen design, the indentation of response categories is not because this feature is not currently available in Blaise.

20   Capitalisation. Mixed text is recommended as this facilitates reading speed. In the literature, it has been consistently found that upper case text takes longer to read (Schriver, 1997). Considering mixed text has been found to facilitate reading speed (Galitz, 1993), it has been recommended as optimal. Pierzchala and Farrant (2000) also recommend using mixed case because it is clearer for interviewers to read.

21   Emphasis. Couper et al (2000) explored three alternatives for providing emphasis, they were **bold**, underline or *italics*. They found bold text is difficult to distinguish from regular text in certain font choices and in direct sunlight. In addition, with some font choices, italicised text becomes too slanted. Underline, on the other hand, was found to be most distinguishable from normal text under a range of different font settings and lighting conditions. Therefore, underline is recommended for adding emphasis to text. However, use emphasis sparingly (Couper et al, 2000).

22   Font and Size. In general it is recommended to examine font size as it would appear on the computers being used for interviewing, and to ensure a single font size across all interviewers is used (Couper et al, 2000). Here the trade-off is between a sufficiently large font to permit maximum readability under a variety of lighting and other environmental conditions, and the ability to fit sufficient information on the screen without scrolling. Therefore, the recommended font size will depend on the screen resolution of the laptop (or notebook) computer to be used.

23   The default Blaise font size is 8 point, which is sufficient for a screen set to 640*480 resolution. However, on a 800*600 resolution screen Couper et al (2000) suggest this would be equivalent to a 12 point font. Couper et al (2000) specifically recommend (for 800*600 screen) using black 12 point in MS San Serif for question text with Instructions displayed in 11 point blue.

24   Although Couper et al (2000) make reference to using dark text on a cream background, whether to use a bold or normal text is not addressed, but he does state that it can be difficult to distinguish bold from normal at times.

25   The recommended font and size for ABS conditions (1024*768 plasma screen) is to use 12 point bold black San Serif for question text (and response categories) with 11 point bold blue (indented text) for instructions. The use of bold text rather than normal, for the ABS screen design, has been done to facilitate the reading of text on high resolution computer screens in conditions which may include direct sunlight. The use of bold will also compensate for the slightly smaller font size, given that the standard screen resolution on ABS computers is somewhat finer than that examined by Couper. An alternative worth testing may be to use 13 point normal black San Serif for question text and 12 point blue for instructions.

Information Bars and Screen Panes:

26   Couper et al (2000) recommend that the CAI screen be designed for keyboard use as distinct from mouse use. This is a valid recommendation, however in the ABS where some surveys (eg. Monthly Population Survey) are expected to be administered in both CAPI and CATI modes, we recommend a more balanced approach (ie. design for both keyboard and mouse use)- see Section 6 for more detail.

27   The status bar should be customised to include information which is relevant for interviewers with option of it being displayed or hidden.

28   Various horizontal lines which appear on the default Blaise screen tend to

break the flow of reading and separate the question text from the response options and from the entry box. It is recommended that no line be displayed between Info Pane and the Answer List Pane, so that the response categories (especially if they are to be read aloud) are more explicitly part of the question. It is recommended that this be tested in the ABS CAI screen design.

Text Fills.

29   A fault of many early DOS systems was the text fills were presented in a different font style (eg. upper case) or colour to clearly identify them as fills. This tends to defeat the purpose of having text fills, which is to make the reading of the question proceed more smoothly and naturally. Couper et al (2000) argue that fills should generally be indistinguishable from the surrounding text. Further, they distinguish between two types of text fills, the first is generic pre-coded fills such as pronouns (he/she), dates (since August 1, 1999), etc., and the second is fills based on information entered by the interviewer, including names, descriptions of vehicles, etc.. The first type of text fill should be indistinguishable from the surrounding text during production interviewing. It is recommended that a library of generic fills should be created for use in several surveys (Statistics Canada guidelines). It may be useful to have these text fills visibly identified (by colour) during testing and debugging.

30   For the second type of fill, Couper et al (2000) recommended that upper case text be accepted mainly because of the current U.S Census Bureau convention to have interviewers enter everything in upper case (ie. have Caps lock on throughout the interview). They argued that having interviewers type mixed text would waste their time and that converting the entry to mixed case text in the Blaise instrument would take extra programming effort. Therefore, they suggested this be the one case where upper case would be acceptable as this is information already entered by the interviewer.

31   While the logic for accepting upper case fills is reasonable for the US Census Bureau, the same does not necessarily apply for the ABS where there is no convention for use of upper case for data entry. On the contrary, the default entry of text in CAI surveys at the ABS is usually in lower case. The argument that fill text should generally be indistinguishable from the surrounding text is much more relevant and is the reason for our recommendation that fill text be displayed as it was collected (generally in lower case) and that no special identification features (such as colour or case) be used except during testing and debugging.

Interviewer Notes.

32   Interviewer notes refer to several different actions interviewers are required to perform, such as handing over a prompt card, or probing the respondent, etc. Couper et al (2000)'s recommends the use of blue text, one font size lower than the question text size and indented one tab stop from the left hand margin. This was chosen for several reasons by Couper et al (2000), so it can be distinguished from black text under a variety of lighting conditions and is good for those who may be colour blind.

33   The current practice for interviewer notes in CAI at the ABS makes use of black font with italics, which seems to follow the practice used with paper forms. In recognition that italic text can be difficult to read on the screen it is recommended that the ABS follow the Couper et al recommendation, namely use blue text one font size smaller than the question text and indented one tab stop from the left hand margin.

34   In addition to these basic design principles, the following points are also recommended concerning interviewer notes. They should:
- start with or include an action verb in capitalised text, so that interviewers can easily find them;
- be placed where interviewer action is required and indented (one tab stop) from the question text;
- not appear in either parentheses or quotation marks;
- always be separated from other instructions by one blank line;
- ensure prompt card instructions appear in the top left corner of the screen followed by the card number. An icon is highly recommended to be used (using wing-dings font) along with the written instruction (see page 12-13 of Couper et al (2000) for detailed instruction on this and examples); and
- "Press enter to continue" instructions should always appear in the Info Pane, below question text (and indented and separated by one line), and if there is no need to record a key entry (eg. for timing or other purposes) then the Answer Pane should be hidden, so that it does not appear that interviewer has to enter a number.

35   Examples of these are shown on Page 12 of Couper et al (2000).

Interviewer help

36   There are typically several different types of on-line help available to interviewers. Couper et al (2000) recommend using Winhelp because it integrates well with the Windows environment. It is also possible to provide some on-line help using Blaise tools.

37   Preparation of Winhelp files can be quite involved and requires special Microsoft software which is not generally part of the ABS software suite. Given that on-line help has not been used for any CAI surveys at the ABS to date, it is proposed that a Blaise based solution be used for the ABS. Winhelp may be reconsidered after some experience has been gained with the basics of on-line help.

38   Some useful points that can be used in devising on-line help for ABS surveys.
- Use a topic identifier (ie. Field Name, Field tag or Blaise help language)
- Couper et al (2000) recommends a different background colour for the help window to distinguish it as a non-entry pop-up window. While it is not currently possible to control the background colour in the Blaise help solution, it does appear to be different to the background colour for the Info Pane.

- The help window should ideally not cover the question text or answer box, so that interviewers are reminded of the context for which they sought help. Therefore, it is recommended that the help window be positioned in the right hand side region of the screen. All the same font size and style can be used as for the remainder of the Blaise instrument.
- When interviewer help is available for a screen, place an icon or help indicator in the bottom right corner of the virtual window
- interviewers should be reminded of the procedure to exit help at the top of the help screen.

General screen design recommendations.

39   Couper et al (2000) offer some additional specific recommendations for screen design and layout (illustrated on page 16) which are discussed below.

40   Remove the Speed Bar, and use the Menu Bar for all interviewer functions (see page 15 of Couper et al, 2000). This is because use of the Speed Bar icons require use of the mouse. The ABS are currently making use of the Speed Bar, and its usefulness will be mostly apparent for CATI where a mouse would be a standard tool. Therefore, it recommended that the ABS allows for the Speed Bar in its "enhanced" design, at least in the testing phase. It is proposed however that the number of speed bar icons be kept to a minimum, to reduce the effect of clutter (eg. have only important icons such as save, exit or help.

41   Do not use the Answer Info Pane. Any information on entry limitations (eg. acceptable ranges, etc) can be placed in the Info Pane.

42   If possible, control interviewer use of the Windows minimise and exit buttons, and hide or remove the windows task-bar.

43   Couper et al (2000) recommends that some contextual information relevant to the interview is placed in the top right of the screen but this is not possible in Blaise. Therefore, it is recommended for the ABS that some context may be placed in the Form Pane using section headings (see section 3). Other context which might be required during the interview (such as the respondent's name) should be treated as an interviewer instruction (ie. one font size smaller than question text, blue and indented).

44   Couper et al (2000) recommend hiding the status bar from the screen for the sake of simplification. It is recommended for the ABS screen, however, to retain the status bar because it provides another place into which useful information can be discretely placed. Useful information that can be placed into the status bar for interviewers include date/time, Blaise field names, relative progress indicators and status flags.

45   Couper et al (2000) proposes that question names rather than numbers make it easier to read routing instructions in the program code. They therefore suggest that for testing and debugging purposes, its useful to have the same identifier appear on the screen as in the routing instructions and program code in order to facilitate identification and correction of problems. For the ABS situation, it is

recommended that, if the information is not already visible in other screen elements, then field identification information can be displayed in the status bar. If the status bar is to be hidden then the language feature of Blaise may be used to provide interviewers with a way of determining the identity of a field.

Section 3: Form Pane

46   The Form Pane (also known as Page) displays the fields specified in the data model and spaces for entering responses. The term "Page" is used by Mark Pierzchala and Graham Farrant (2000) to refer to the bottom part of the screen because they argue that the Form Pane should correspond to a page in a paper questionnaire.

47   The design and specification of the Form Pane is often neglected but is considered by Pierzchala and colleagues to be just as important as the design of the Info Pane. In some instances, Pierzchala and Farrant state that it is even more important. Specifically, they argue that because the Form Pane is analogous to a page in a paper questionnaire, it organises and displays related data elements together.

48   There are several features that can be specified in the Form Pane that enhance the presentation for the interviewer. Most of the time, screen designers/programmers end up using the default features and these are not necessarily the most appropriate features for survey interviewing.

49   The Form Pane is made up of a Grid, the cells of which form smaller elements called Field Panes. A Field Pane is an area where the field description, data entry cell, and other related elements can be displayed. Table 1 shows the variety of elements which can be displayed in a Field Pane and comments on their use. Our recommendations for the ABS are given later.

Table 1: Elements that can be used in the Field Pane

Element	Description	Comment
Field Name	Used in the Rules of a Blaise program to describe routing, edit checks, and computations.	Based on Pierzchala and Farrant (2000), the Field Name is not recommended to be in the Blaise Form Pane or in the edit jump box (interviewer never sees it).
Field Tag	It can be used to jump to a field through the jump dialog	Based on Pierzchala and Farrant (2000) the Field Tag is recommended to be used for question numbers (or other identification) if they are specified. It can also be used for selected section jump points.
Field Text	This is the full question text (as displayed in the Info Pane)	Based on Pierzchala and Farrant (2000) the Field text is generally not recommended to be displayed in the Field Pane due to size limitations.
Field Description	May be displayed in the Form Pane as an alternative to the Field Name or Field Text and also can be displayed in the edit dialog.	Can be used as the interviewer identifier and additionally as a label in a downstream system. If there is an edit then the fields can be identified by the field description.
Field Value	Shows the current values and is represented in the Blaise Form Pane by a data entry cell.	Based on Pierzchala and Farrant (2000), this element is compulsory if a response of any kind is to be recorded. The Field Value cell can be suppressed if not required (eg. for heading text).
Answer Name	The Answer Name occurs on enumerated fields only and is the identifying name for each category. It is a single string of characters and may not contain a blank. If carefully assigned this name can provide some meaning to the Answer Code.	Based on Couper et al, it is recommended that the Answer Name be displayed in the Field Pane, to the right of the Entry Field- to serve as confirmation of entry. In addition, they suggest that setting the colour to grey gives the Answer name slightly less emphasis because the default is black, bold. Couper et al (2000) also recommend avoiding the use of underscores in the Answer Name. Use short but meaningful Answer Names in mixed case with appropriate use of capitalisation.
Answer text	The Answer Text occurs on enumerated questions only and is the descriptive label associated with a category. The Answer text is selected.	The Answer text can be displayed on the Field Pane but is not recommended because the way it is displayed gives the appearance it can be edited (which is not possible) and because the text may be too long for the relatively small space generally assigned to the Field Pane.
Full Answer List	This is the full set of answers available for a field and is already displayed in the Info Pane.	The full answer list is not recommended because there is too much text for the relatively small space assigned and because it is already displayed in the Info Pane.
Error Counter	The Error Counter shows the number of errors which have been triggered by the value of a particular field.	This is a small piece of information which may be of interest during editing. It is not recommended to be displayed for interviewers.
Remarks Point	Shows as a paper clip symbol whenever remarks have been made by the interviewer.	This is a small and useful symbol and should be displayed for interviewing.

50   A column in the Form Pane is made up of a number of Field Panes stacked up on one another. Two columns of Field Panes is normal in Blaise, though it is possible to have only one column (this is not recommended by Pierzchala and Farrant, 2000 however). It is also possible to have three or more columns of Field Panes when a survey requires a great deal of ad hoc navigation and data density.

51   Pierzchala and Farrant (2000) recommendations for Form Pane

enhancements are illustrated in Figure 2.

52   They recommend the specification of readable Field Descriptions to identify
each Field (as opposed to the default Field Name), with heading labels that group
related questions, using two columns in the Form Pane with data entry cells in each
column, and size 10 font (for an 800*600 display). An equivalent size on 1024*768
screen as used in the ABS would be size 11 font. Use of the Field Description as
distinct from the default Field Name gives more flexibility, since spaces can be
included in the description. Field descriptions can also be multilingual and used as
the field identifier in the edit jump dialog.

53   The precise number of lines to be shown in a column of the Field Pane is not
considered by Pierzchala. In consideration of the navigation and context benefits it is
recommended, for the ABS situation, that as many lines be shown in the Field Pane
as can fill the remainder of the screen, after an optimal Info Pane size has been
determined. Some alternative settings where the number of lines is reduced (or the
space between the lines is increased) should be tested, however, before deciding on
the optimal number of lines to be displayed.

54   The recommended elements to be displayed in the Field Pane for ABS use
are the Field Description (brief), Remarks Point, Field Value, and Answer Name, all
formatted as per the comments in the above table. The Field Text and Full Answer
List, with Answer Texts, are already shown in the Info Pane. The Field Name and
Tag can be displayed in the Status Bar (as per paragraph 44) and the Error Counter
is not considered relevant for interviewing.

Section 4: Question Types

General recommendations.

55   The following general recommendations are made about various question types:

- The size and shape of the input field should suggest the action that is required. In other words, avoid providing small entry boxes with scrolling text.
- Use common conventions to suggest type on entry (e.g. radio button for single selection, check boxes for multiple selections, etc.).
- Avoid having some response options invisible on the screen (e.g. through scrolling).
- Provide immediate visual feedback of selections made. In Blaise this means that answers entered in the Form Pane must also be checked in the Answer List Pane (this is the default Blaise operation).
- Where input responses have specific formats (e.g. dates, dollar amounts, telephone numbers, etc.), Couper et al (2000) strongly recommend the use of masks or templates in the Form Pane.

Multiple Response (Enter all that apply) Questions.

56   Couper et al (2000) recommends several enhancements for multiple response items, especially to provide visual cues to the interviewer. They are as follows:

- Have an explicit interviewer instruction in the Info Pane (e.g. ENTER all that apply)
- Indicate to the interviewer how many entries are permissible (e.g. ENTER up to 5 responses);
- Provide several boxes (instead of one long box), to indicate the number of entries permitted and to visually separate each selection;
- Provide explicit masks or delimiters in the entry box to serve the same purpose (the mask is only available in Blaise for strings only, and would not permit logical operations based on the entries). Therefore, agree on, and train interviewers on, a standard delimiter (e.g space bar) for separating multiple response entries.
- For long lists, avoid scrolling and drop down boxes if possible. In other words, 3 columns of response codes (alphabetically ordered) is preferable to a drop-down box);
- Where necessary, use vertically scrolling only in long lists;
- Provide interviewer instructions on how to invoke a drop box for long lists;
- Use grids where appropriate (eg. where questions being asked facilitate a topic-based approach as an alternative to a person-based approach), and allow flexible movement on all grids. Use vertical scrolling in grids, splitting the grid into separate sub-grids if necessary; and
- Use the rows of the grid for entities and the columns for questions/items. Set the default flow through the grid to be entity-based, that is row by row.

Section 5: Navigation and Contextual Aids

57   To avoid the segmentation effect, in which interviewers report losing their place in the instrument, Couper et al (2000) have suggested developing a "master control screen" to facilitate interviewer navigation and flexibility (see also Sperry et al, 1998). They suggest this could present a list of the sections of the CAI instrument. Those sections available for access could be designated as such, while those not yet accessible to the interviewer could be greyed out. The interviewer could then enter any section that was available. Upon completion of the section, the instrument would return to the master control screen for selection of the next section to do. Figure 24 from Couper et al (2000) on page 40 shows an example of the "master control panel". Interviewer's could also use it to tell at a glance their progress in an interview.

58   For the ABS situation it is recommended that consideration be given to using such a control screen for only the more complex surveys at this stage. Instead, it is recommended that more work be done with the use of parallel blocks, a feature of Blaise which did not receive attention by Couper. The Blaise software has a special feature called Parallel Block which can be used to depart from the serial processing order that is specified in the rules. This feature allows different sections of a questionnaire to be completed in parallel to the main path. Once Parallel Blocks are in place the interviewer can access the parallel blocks through a menu option or through tabs at the top of the interview screen. The latest version of Blaise has a feature called Parallel Blocks to be identified and accessed using tabs which are positioned at the top of the Info Pane. The text which appears on the tabs can also be tailored to the circumstances of the interview, showing respondent names and status of their interview. It is recommended that this feature of Blaise be used where flexibility of navigation is required.

59   Couper et al identify two types of information which can provide interviewers with context and navigation information on the screen is useful, even if not used for major jumps.
- Navigation information (e.g. section identifiers; to remind interviewers where they are in the instrument)
- Context information (eg. information about the current topic; to remind interviewers who or what they are asking about is presented at the top of the screen).

60   These both have design implications. Navigation information is a fixed feature of the survey instrument, and can be built into the Blaise code at the outset. Context information requires the use of fills based on information collected earlier in the survey interview. Both types of information are for the (occasional) use of the interviewer, and should thus be outside the main visual field.

61   In general, Couper et al (2000) recommend placing context information in the upper right corner of the screen. However, this is hard to do in Blaise at present, as the placement of the information has to be adjusted based on the preceding question text. Therefore, they recommend placing the context information in the screen header area or status bar (which can require much programming in Blaise) or

alternatively displaying it in the Form Pane. Again, this is not ideal either, because Couper et al propose that placing all the contextual information in the Info Pane tends to break the visual flow between question text and the entry field, and the designer has little control over the format of this information in the Form Pane . Couper et al concluded that they are currently continuing to work on alternative approaches to displaying both context and navigation information (see Figure 25 and 26 from Couper et al, 2000 on page 42).

62   Given some of the limitations mentioned above,the recommendation for the ABS situation is to put important context into both the Info Pane and Form Pane to assist in the reduction of clutter in any one area of the screen interface. This is consistent with Couper et al's and Pierzchala's general recommendation to produce a cleaner design with more "white space" and a clearer distinction of the key components of the screen. Specifically, it is recommended that the ABS balance the insertion of context throughout the screen design by including important context in the interviewer instructions in the Info Pane (eg name of respondent) and general navigation information (eg headings, etc) in the Form Pane.

Section 6: Input Mode

63   Couper et al (2000) report that the mouse is not a suitable input device for CAPI interviews and that screens should be designed to facilitate use of a keyboard. Considering that the ABS uses a combination of CAPI and CATI to administer the MPS and that a mouse device is integrated into the ABS computers, it is recommended that the CAI screen be designed to accommodate the use of both keyboard and mouse with slightly more emphasis on the keyboard. This means providing relevant shortcut keys and menu options for keyboard use and convenient mouse operated icons for common functions (eg exit, save)

Other Issues.

66   With all the recommendations, Couper et al (2000) state that one needs to weigh consistency and clarity within an instrument with consistency across instruments and consistency with previous ways of presenting items. In other words, while conversion to CAPI allows one to rethink existing practices, one should not change simply for the sake of doing so.

67   A summary of the settings for the ABS screen design, with the comparative settings currently in use, is shown at Attachment A.

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ATTACHMENT A.

Summary of the recommended ABS screen design features compared with the current ABS (or default) features.

Screen Element	optimal screen design features	Current ABS Screen Design features
Info Pane		
Question text font, size and colour	12 point bold San Serif black	12 point bold San Serif black
Question text case	mixed case	upper case
Instruction text	11 point bold San Serif blue indented one tab stop	12 point bold San Serif black italics not indented
Instruction structure	use icons, upper case action word	none
Line length	about 60 characters	Width of screen
Margins	Left - 5mm, Top - 5mm, Right - 100mm	None (text to fit the screen)
Fill text	Blend with existing text	Highlight in blue
Form Pane		
Field Name	Not displayed/used	Not displayed/used
Field Tag	Use for question identification. Show in the Status bar	Shown in the Form Pane
Field Text	Not displayed/used	Not displayed/used
Field Description	Used as interviewer identifier and as a label in a downstream system	Not displayed
Field Value	Displayed/used	Displayed/used
Answer Name	Displayed in Field Pane, to the right of the Entry Field - colour grey	Displayed in Field Pane, to the right of the Entry Field - colour black
Full Answer text	Not displayed (already in Info Pane)	Not displayed
Error counter	Not displayed to interviewers	Not displayed
Remarks point	Displayed for interviewing	Displayed for interviewing
Columns in Form Pane	Two columns in Form Pane	Two columns in Form Pane
Rows in the Form Pane	Fill the Form Pane	Show only one row
Interviewer help	on-line help using Blaise features	No on-line help
Speed bar	limited number of icons displayed	Limited number of icons displayed
Windows task bar	hide or remove	Displayed
Contextual Information	Placed in Form Pane using section headings and other context in interviewer instructions (eg. respondents name) on the Info Pane	Some context information shown in interviewer instructions
Status bar	Retention of status bar with information including date/time, Blaise Field Name, etc.	Status bar containing default information not very relevant for interviewers
Question identification	Use question descriptions (brief) in the Form Pane	Use tag (in Form Pane)
Parallel Blocks	Use for navigational aid	Not used significantly

Reference:
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